

VRscan3D – an Interactive Simulator for Terrestrial Laser Scanning

Darius Popovas, Thomas Luhmann (Germany), Denys Gorkovchuk, Julia Gorkovchuk (Ukraine), Maria Chizhova and Mona Hess (Germany);

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SUMMARY

Within the project VRscan3D, a terrestrial laser scanner simulator has been developed as educational tool for learning and teaching laser scanning processes. Simulator allows users to create realistic data in the absence of a real measuring device in a modelled real life environment (digital twin). Within this simulated environment, the user can freely navigate and select suitable scanning positions and place targets. At each scanning station a simulated scan is performed adapted to the technical specifications of a real scanner model. As a result, 3D point clouds for each station are generated, and can be further processed for registration and modelling using standard software packages.

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